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CONFIDENTIAL

24 July 1957

MEMORANDUM FOR THE RECORD

SUBJECT: Termination of Portable Hydrogen Generator Development
by []

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1. On 23 July 1957 the undersigned met with [] in his office at [] for the purpose of witnessing the tests on the 22 liter generator (roughly 1/10 of full scale) and to inform him of the decision to terminate his work on the portable hydrogen generator.

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2. As perhaps could be expected, in view of the experience of the past eight months, the visit was totally unnecessary. The 22 liter generator which was to be demonstrated for the undersigned had been broken in its first test (which had been run on Monday 22 July 1957). [] had not seen fit to inform the undersigned of this fact to see if this might alter his plans, however, and so the undersigned arrived at the laboratory expecting to witness the test.

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There being no generator to demonstrate, the undersigned spent the time discussing with [] some of his experiments on: rate vs. temperature (which turns out to be quite independent over the range 0°C to 100°C); rate vs. particle size (which was shown to be reasonably independent, at least for purposes of control); and what impurities were present in the lithium hydride which might be poisonous in the off-gas (impurities were present in negligible amounts with no danger to operator). [] again reiterated his proposition that the primary control for the system was the rate of addition of fresh water onto the unreacted lithium hydride.

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[] described briefly his test with the 22 liter generator. In addition to the fact that the generator broke about six minutes after generation was begun, the run was unsuccessful from the standpoint of control. [] stated that the generator was under-designed and did not lend itself to self-sustaining, self-controlling generation. He felt that this could be remedied however in later models by increasing the diameter of the fresh water intake tube.

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3. The undersigned informed [] that in view of the stringent budget situation it was no longer defensible to carry on concurrent developments for an item of no higher priority than the portable hydrogen generator. This being the case, it had become necessary to choose between the [] generator and [] and the [] generator was decided upon as the most promising. [] was assured that this was a budgetary decision and no more. He was agreeable to the decision and said he would submit a report on his work to date.

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[redacted] was invited by the undersigned to visit [redacted] 25X1
to discuss the generator or any new work which it might be possible for him 25X1
to contribute on. He said that he would.

[redacted] 25X1
[redacted] 25X1

[redacted]

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